

294857US0PCT.ST25.txt
SEQUENCE LISTING

<110> Nakaita, Yasukazu
Tsuchiya, Youichi

<120> A method for detecting and determining lactic acid bacterium

<130> 294857US0PCT

<140> 10/589389
<141> 2006-08-15

<150> PCT/JP05/02331
<151> 2005-02-16

<150> JP 2004-040381
<151> 2004-02-17

<160> 30

<170> PatentIn version 3.3

<210> 1
<211> 1565
<212> DNA
<213> Lactobacillus hexosus

<220>
<221> source
<222> (1)..(1565)
<223> strain="SBC8050"

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120
cggtgtagta acacgtgggt aacctacca aaagtggggg ataacatttg gaaacagatg
180
ctaataccgc ataatttaag tgaccacatg gtcacttaat gaaagatggy ttcggctatc
240
acttttggat ggacccgcgg cgtattagct agttggtggg ataacggcct accaaggcga
300
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420
ccgcgtgagt gaagaagggt ttcggatcgt aaaactctgt tgttggagaa gaacagggac
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480

tagagtaact gttagtcccta tgacggtatc caaccagaaa gccacggcta actacgtgcc

540

agcagccgcg gtaataccta ggtggcaagc gttgtccgga tttattgggc gtaaagcgag

600

cgcaggcggt tttttaagtc tgatgtgaaa gccttcggct taaccgaaga agtgcattag

660

aaactgggaa acttgagtgc agaagaggag agtggaactc catgtgtagc ggtgaaatgc

720

gtagatatat ggaagaacac cagtggcgaa ggcggctctc tggctctgtaa ctgacgctga

780

ggctcgaaag tatggggagc gaacaggatt agataccctg gtagtcata ccgtaaacga

840

tgaatgctaa gtgtggagg gtttcgcc ttcagtgtg cagctaacgc attaagcatt

900

ccgcctgggg agtacgaccg caagggtgaa actcaaagga attgacgggg gcccgcaaa

960

gcggtggagc atgtggttta attcgaagct acgcgaagaa ccttaccagg tcttgacatc

1020

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1080

ttgtcgtcag ctcgtgtcgt gagatgttg gttaagtccc gcaacgagcg caacccttat

1140

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1200

aggtggggat gacgtcaa at cagcatgccc cttatgacct gggctacaca cgtgtacaa

1260

tggttggtac aacgagttgc gaacccgcga gggtaagcta atctcttaaa gccaatctca

1320

gttcggattg taggctgcaa ctgcctaca tgaagtcgga atcgctagta atcgcggatc

1380

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tttghtaacac ccgaagccgg tggggtaacc tctatgagga gctaaccgtc taagggtggga
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1560

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1565

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<211> 517

<212> DNA

<213> Lactobacillus hexosus

<220>

<221> source

<222> (1)..(517)

<223> strain="SBC8050"

<400> 2

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atactgagct taagggttagc ggtacaattc cagaacatga acacggcaca attgttcatt
180

tttggcctga tcatgatatt tttagggaaa caaccgttta tgatattaaa attttaacaa
240

cgcgaaattcg tgagttggcc tttttgaata aggggtttacg aattagcatt gaagatttac
300

gtcctgagaa accgaccaa gaagttttcc actatgaagg tggcattaag agttacgttg
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agtatattaga caacggaag cagatcttt ttccagagcc aatttacgtg gaagggtgacg
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517

<210> 3
 <211> 1526
 <212> DNA
 <213> *Lactobacillus pseudocollinoides*

<220>
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 <222> (1)..(1526)
 <223> strain="SBC8057"

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 aacaacaaaa accgcatggt tttgtttga aagggtggtt cggctatcac tctggaagg
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 acccgcgcg tattagctag ttggtggagt aacggttcac caaggcaatg atacgtagcc
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 cttaaagtctg atgtgaaagc cttcggctta accggagaag tgcatcgga actgggtaac
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294857USOPCT.ST25.txt

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840

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900

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960

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1020

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1080

cggtgctgta gatgttgggt taagtccgc aacgagcgc acccttattg tcagttgcc
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gcatttagtt gggcactctg gcgagactgc cggtgacaaa ccggaggaag gtggggatga
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cgtaagtca tcatgcccct tatgacctgg gctacacag tgctacaatg gatgtacaa
1260

cgagttgcga actcgcgaga gcaagctaatt ctcttaaagc cattctcagt tcggactgta
1320

ggctgcaact cgcctacag aagtcggaat cgctagtaat cgcgatcag catgccgcg
1380

tgaatacgtt cccgggcctt gtacacaccg cccgtcacac catgagagtt tgcaaacacc
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1500

aagtcgtaac aaggtagccg taggag
1526

<210> 4
<211> 484
<212> DNA
<213> Lactobacillus pseudocollinoides

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<220>
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<222> (1)..(484)
<223> strain="SBC8057"

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caatgaaggt cattgacgaa ggggtaccag aaaacattcg cgggaccacg gtgcatttct
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tgccggaccc agatattttc cgggaaacca ctacgtacga cattaagatc ctgaccaccc
240
ggatccgcga gctggctttc ttaacaagg gtctgcgcac tactatccgt gatgagcggc
300
ctgacgagcc aactgaacaa tcctttatgt acgaaggcgg gatccgtcat tacgttgaat
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atttaaataa aaacaaggat gtcattttcc ctgaaccaat ctatgttgaa ggtgaagaaa
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agggcatcac ggttgaagtt gcgttgcagt ataccgacga ctaccactca aacctgttga
480
cggt
484

<210> 5
<211> 330
<212> DNA
<213> Pediococcus damnosus

<220>
<221> source
<222> (1)..(330)
<223> strain="SBC8023"

<220>
<221> misc_feature
<222> (19)..(19)
<223> n strands for any base

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aatgtatatt ggggcaacaa gtgcccaagg actccatcat ttagtttggg aaattattga

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taacggaatt gatgaagctt tagccgggtt tgcggataaa atcgatgtga cggttgaaaa

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agataatagc attacggttt ttgataatgg ccgaggaatt ccagttggaa tccaggctaa

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cggcggcggg tataaagttt caggtgggta

330

<210> 6

<211> 21

<212> DNA

<213> Artificial

<220>

<223> a primer for *L. hexosus*

<400> 6

gcggtaaagt taatactgag c

21

<210> 7

<211> 20

<212> DNA

<213> Artificial

<220>

<223> a primer for *L. hexosus* or *L. pseudocollinoides*

<400> 7

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20

<210> 8

<211> 18

<212> DNA

<213> Artificial

<220>

<223> a primer for *L. pseudocollinoides*

<400> 8

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18

<210> 9
<211> 17
<212> DNA
<213> Artificial

<220>
<223> a primer for *P. damnosus*

<400> 9
aagttcttga aggtttg

17

<210> 10
<211> 16
<212> DNA
<213> Artificial

<220>
<223> a primer for *P. damnosus*

<400> 10
tcggccatta tcaaaa

16

<210> 11
<211> 21
<212> DNA
<213> Artificial

<220>
<223> a primer

<400> 11
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21

<210> 12
<211> 20
<212> DNA
<213> Artificial

<220>
<223> a primer

<400> 12
ggataccgct actgcatgag

20

<210> 13
<211> 18
<212> DNA
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<220>

<223> a primer

<400> 13
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18

<210> 14
<211> 20
<212> DNA
<213> Artificial

<220>
<223> a primer

<400> 14
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20

<210> 15
<211> 19
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<220>
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<222> (1)..(1)
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<222> (19)..(19)
<223> phosphorylated

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19

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<211> 20
<212> DNA
<213> Artificial

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<223> a probe

<220>
<221> modified_base
<222> (1)..(1)
<223> LC Red640 labelled

<220>
<221> modified_base

<222> (20)..(20)
 <223> phosphorylated

<400> 16
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<210> 17
 <211> 20
 <212> DNA
 <213> Artificial

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<220>
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 <222> (20)..(20)
 <223> phosphorylated

<400> 17
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20

<210> 18
 <211> 18
 <212> DNA
 <213> Artificial

<220>
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<220>
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 <222> (1)..(1)
 <223> LC Red705 labelled

<220>
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 <222> (18)..(18)
 <223> phosphorylated

<400> 18
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18

<210> 19
 <211> 22
 <212> DNA
 <213> Artificial

<220>
<223> a probe

<220>
<221> modified_base
<222> (22)..(22)
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<400> 19
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22

<210> 20
<211> 23
<212> DNA
<213> Artificial

<220>
<223> a probe

<220>
<221> modified_base
<222> (23)..(23)
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<210> 21
<211> 24
<212> DNA
<213> Artificial

<220>
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<220>
<221> modified_base
<222> (1)..(1)
<223> LC Red705 labelled

<220>
<221> modified_base
<222> (24)..(24)
<223> phosphorylated

<400> 21
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24

<210> 22
<211> 21

<212> DNA
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 <223> a probe

<220>
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 <222> (21)..(21)
 <223> FITC labelled

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21

<210> 23
 <211> 18
 <212> DNA
 <213> Artificial

<220>
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<220>
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 <222> (1)..(1)
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<220>
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 <222> (18)..(18)
 <223> phosphorylated

<400> 23
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18

<210> 24
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 <212> DNA
 <213> Artificial

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 <223> a primer

<400> 24
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19

<210> 25
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 <212> DNA
 <213> Artificial

<220>

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<223> a primer
<400> 25
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21

<210> 26
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<212> DNA
<213> Artificial

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<400> 26
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21

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<213> Artificial

<220>
<223> a primer (GYPR)
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<210> 28
<211> 23
<212> DNA
<213> Artificial

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<223> a primer (GP1-F)

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<223> n strands for any base

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<222> (11)..(11)
<223> n strands for any base

<220>
<221> misc_feature
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<220>
<221> misc_feature
<222> (14)..(14)

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<223> n strands for any base
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23

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<220>
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21

<210> 30
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 <213> Artificial

<220>
 <223> a universal primer 16S rRNA gene

<400> 30
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21